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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,225	11/26/2001	Ruoping Chen	AREN-0308	1454

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EXAMINER	
BASI, NIRMAL SINGH	

ART UNIT	PAPER NUMBER
1646	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/995,225	CHEN ET AL.	
	Examiner	Art Unit	
	Nirmal S. Basi	1646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *1* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 February 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-40* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. ***Election/Restriction***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

Claims 1 to 80 are pending in the instant application.

I. Claim 1 drawn to a G protein coupled receptor encoded by the amino acid sequence of SEQ ID NO:2, classified in class 530, subclass 300.

II. Claim 2 drawn to a constitutively activated version of the G protein coupled receptor of claim 1, classified in class 530, subclass 350.

III. Claims 3 and 4 drawn to a plasmid comprising a vector and the CDNA of SEQ ID NO:1, and host cell comprising said plasmid, classified in class 435, subclass 320.1.

IV. Claim 5 drawn to a G protein coupled receptor encoded by the amino acid sequence of SEQ ID NO:4, classified in class 530, subclass 300.

V. Claim 6 drawn to a constitutively activated version of the G protein coupled receptor of claim 5, classified in class 530, subclass 350.

VI. Claims 7 and 8 drawn to a plasmid comprising a vector and the CDNA of SEQ ID NO: 3, and host cell comprising said plasmid, classified in class 435, subclass 320.1.

VII. Claim 9 drawn to a G protein coupled receptor encoded by the amino acid sequence of SEQ ID NO:6, classified in class 530, subclass 300.

VIII. Claim 10 drawn to a constitutively activated version of the G protein coupled receptor of claim 9, classified in class 530, subclass 350.

IX. Claims 11 and 12 drawn to a plasmid comprising a vector and the CDNA of SEQ ID NO:5, and host cell comprising said plasmid, classified in class 435, subclass 320.1.

X Claim 13 drawn to a G protein coupled receptor encoded by the amino acid sequence of SEQ ID NO:8, classified in class 530, subclass 300.

XI. Claim 14 drawn to a constitutively activated version of the G protein coupled receptor of claim 13, classified in class 530, subclass 350.

XII. Claims 15 and 16 drawn to a plasmid comprising a vector and the CDNA of SEQ ID NO:7, and host cell comprising said plasmid, classified in class 435, subclass 320.1.

XIII. Claim 17 drawn to a G protein coupled receptor encoded by the amino acid sequence of SEQ ID NO:10, classified in class 530, subclass 300.

XIV. Claim 18 drawn to a constitutively activated version of the G protein coupled receptor of claim 17, classified in class 530, subclass 350.

XV. Claims 19 and 20 drawn to a plasmid comprising a vector and the CDNA of SEQ ID NO:9, and host cell comprising said plasmid, classified in class 435, subclass 320.1.

XVI. Claim 21 drawn to a G protein coupled receptor encoded by the amino acid sequence of SEQ ID NO:12, classified in class 530, subclass 300.

XVII. Claim 22 drawn to a constitutively activated version of the G protein coupled receptor of claim 21, classified in class 530, subclass 350.

XVIII. Claims 23 and 24 drawn to a plasmid comprising a vector and the CDNA of SEQ ID NO:11, and host cell comprising said plasmid, classified in class 435, subclass 320.1.

XIX. Claim 25 drawn to a G protein coupled receptor encoded by the amino acid sequence of SEQ ID NO:14, classified in class 530, subclass 300.

XX. Claim 26 drawn to a constitutively activated version of the G protein coupled receptor of claim 25, classified in class 530, subclass 350.

XXI. Claims 27 and 28 drawn to a plasmid comprising a vector and the CDNA of SEQ ID NO:13, and host cell comprising said plasmid, classified in class 435, subclass 320.1.

XXII. Claim 29 drawn to a G protein coupled receptor encoded by the amino acid sequence of SEQ ID NO:16, classified in class 530, subclass 300.

XXIII. Claim 30 drawn to a constitutively activated version of the G protein coupled receptor of claim 29, classified in class 530, subclass 350.

XXIV. Claims 31 and 32 drawn to a plasmid comprising a vector and the CDNA of SEQ ID NO:15, and host cell comprising said plasmid, classified in class 435, subclass 320.1.

XXV. Claim 33 drawn to a G protein coupled receptor encoded by the amino acid sequence of SEQ ID NO:18, classified in class 530, subclass 300.

XXVI. Claim 34 drawn to a constitutively activated version of the G protein coupled receptor of claim 33, classified in class 530, subclass 350.

XXVII. Claims 35 and 36 drawn to a plasmid comprising a vector and the CDNA of SEQ ID NO:17, and host cell comprising said plasmid, classified in class 435, subclass 320.1.

XXVIII. Claim 37 drawn to a G protein coupled receptor encoded by the amino acid sequence of SEQ ID NO:20, classified in class 530, subclass 300.

XXI.X Claim 38 drawn to a constitutively activated version of the G protein coupled receptor of claim 37, classified in class 530, subclass 350.

XXX. Claims 39 and 40 drawn to a plasmid comprising a vector and the CDNA of SEQ ID NO:19, and host cell comprising said plasmid, classified in class 435, subclass 320.1.

The inventions are distinct, each from the other because:

The inventions are distinct, each from the other because of the following reasons.

Inventions I-XXX are patentably distinct products.

The polypeptide and the plasmids of inventions I to XXX are structurally and functionally distinct chemical compounds each of which can be made and used without any one or more of the other compounds. These compounds are lack a common utility which is based upon a common structural feature which has been identified as the basis for that common utility.

The polypeptide of group 1, 4, 7, 10, 13, 16, 19, 22, 25 and 28 and the plasmid comprising a vector and cDNA of groups 3, 6, 9, 12, 15, 18, 21, 24, 27 and 30 are patentably distinct inventions for the following reasons. Polypeptides, which are composed of amino acids, and polynucleotides, which are composed of purine and pyrimidine units, are structurally distinct molecules; any relationship between a polynucleotide and polypeptide is dependent upon the information provided by the nucleic acid sequence open reading frame as it corresponds to the primary amino acid sequence of the encoded polypeptide. In the present claims the plasmid also encodes may other proteins in addition to the cDNAs disclosed. Furthermore, the information provided by the plasmid can be used to make a materially different compounds, such a probes for use in hybridization assays. The polypeptide can made by chemical synthesis or be recovered from a natural source using by biochemical means. For instance, the polypeptide can be isolated using affinity chromatography. The polypeptide can be used to produce antibodies For these reasons, polypeptide of group 1, 4, 7, 10, 13, 16, 19, 22, 25 and 28 and the plasmid comprising a vector and cDNA of groups 3, 6, 9, 12, 15, 18, 21, 24, 27 and 30 are patentably distinct.

The polypeptide of group 1, 4, 7, 10, 13, 16, 19, 22, 25 and 28 and the polypeptide of groups 2, 5, 8, 11, 14, 17, 20, 23, 26, and 29 are patentably distinct inventions for the following reasons. The polypeptide each have a different structure and different G-protein coupled receptor activity. The polypeptides will bind different ligands. Further some of the receptors are constitutively active while others are not.

The individual receptors can be used to produce antibodies that bind specifc epitopes on the polypeptide.

Furthermore, searching the inventions of groups I -XXXI together would impose a serious search burden. In the instant case, the search of the various polypeptides and polynucleotides are not coextensive, each requires a different sequence and literature search. The inventions of plasmids and polypeptide have a separate status in the art as shown by their different classifications. As such, it would be burdensome to search the inventions of groups I-XXX together.

The polypeptide of group 2, 5, 8, 11, 14, 17, 20, 23, 26, and 29 and the plasmid comprising a vector and cDNA of groups 3, 6, 9, 12, 15, 18, 21, 24, 27 and 30 are patentably distinct inventions beacue the plasmids neither encode the polypeptides of groups 2, 5, 8, 11, 14, 17, 20, 23, 26, and 29 or produce said polypeptides. Further the polypeptides, which are composed of amino acids, and polynucleotides, which are composed of purine and pyrimidine units, are structurally distinct molecules; any relationship between a polynucleotide and polypeptide is dependent upon the information provided by the nucleic acid sequence open reading frame as it corresponds to the primary amino acid sequence of the encoded polypeptide. The plasmid can be used to make protein unrelated to the polypeptide of groups 2, 5, 8, 11, 14, 17, 20, 23, 26, and 29. The polypeptide of groups 2, 5, 8, 11, 14, 17, 20, 23, 26, and 29 can be used to produce antibody.

The inventions of Groups I, II, III, IV, V and VI have a separate status in the art as shown by their different classifications. As such, it would be burdensome to search any combination of the inventions of Groups I, II, III, IV, V or VI together.

Because these inventions are distinct for the reasons given above, and the search required for each group is not required for the other groups because each group requires a different non-patent literature search due to each group comprising different products a, restriction for examination purposes as indicated is proper. It would be burdensome to search any combination of the inventions of groups I-XXX.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(h).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nirmal S. Basi whose telephone number is 571-272-0868. The examiner can normally be reached on 9:00 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brenda G Brumback can be reached on 571-272-0961. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nirmal S. Basi
Art Unit 1646
September 29, 2004

Brenda Brumback
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